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LUTHER D. THOMAS, Clerk
By: Deputy Clerk

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ORIGINAL

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF GEORGIA
GAINESVILLE DIVISION

UNITED STATES OF AMERICA,

v.

WILLIAM EMMETT LECROY, JR.

Criminal Indictment
No. 2:02-CR-038

ORDER FOR SERVICE OF REPORT AND RECOMMENDATION OF UNITED STATES MAGISTRATE JUDGE

Attached is the Report and Recommendation of the United States Magistrate Judge made in accordance with 28 U.S.C. § 636(b)(1) and this Court's Local Criminal Rule 58.1. Let the same be filed and a copy, with a copy of this order, be served upon counsel for the parties.

Each party may file written objections, if any, to the attached Report and Recommendation within ten (10) days after being served with a copy of it. 28 U.S.C. § 636(b)(1). Should objections be filed, they shall specify with particularity the alleged error(s) made (including reference by page number to the transcript if applicable) and shall be served upon the opposing party. The party filing objections will be responsible for obtaining and filing the transcript of any evidentiary hearing for review by the District Court. If no objections are filed, the Report and Recommendation may be adopted as the opinion and order of the District Court and any appeal of factual findings will be limited to a review for plain error or manifest injustice. United States v. Slay, 714 F.2d 1093 (11th Cir.

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1983), cert. denied, 464 U.S. 1050 (1984).

The Clerk is **directed** to submit the Report and Recommendation with objections, if any, to the District Court after expiration of the above time period.

IT IS SO ORDERED, this 9 day of January, 2004.

Susan S. Cole
SUSAN S. COLE
United States Magistrate Judge

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v.	:	Criminal Indictment
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REPORT AND RECOMMENDATION

Introduction

Before the court is Defendant's Motion to Exclude Testimony from Forensic Document Examiner and Request for a Daubert[1] Hearing [Doc. 128]. Defendant filed this motion along with a companion Motion to Exclude Testimony from Forensic Biologist, J. Bradley Pearson, and Request for a Daubert Hearing [Doc. 127]. The Government filed responses to both motions [Docs. 133 and 134] and objected to Defendant's Request for a Daubert hearing in connection with both motions. The undersigned scheduled Daubert hearings in connection with both motions, and the Government appealed to United States District Judge Richard W. Story. By Order dated October 29, 2003 [Doc. 193], Judge Story sustained the Government's objection to a Daubert hearing with regard to the DNA evidence to be provided by J. Bradley Pearson and overruled the Government's objection to a Daubert hearing with respect to the forensic document examiner's testimony.

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[1] Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993).

Accordingly, the Daubert hearing regarding forensic document examination proceeded before the undersigned on November 18, 19 and 21, 2003. In addition, a videotaped deposition of Professor Michael Saks was taken outside the presence of the undersigned on December 5, 2003. Defendant then filed the transcript [Doc. 258] and videotape of Professor Saks' deposition and a post-hearing brief [Doc. 259]. The Government thereafter filed its post-hearing brief [Doc. 272]. Defendant's motion with respect to the testimony of the Government's forensic document examiner is now ripe for Report and Recommendation to the District Court Judge. Defendant's motion with respect to the testimony of Forensic Biologist J. Bradley Pearson [Doc. 127] is **DENIED as moot** in light of Judge Story's October 29, 2003 Order.

The instant motion was filed in connection with the Government's summary [Doc. 115] of the expected trial testimony of expert witness, Arthur T. Anthony, a forensic document examiner employed as Chief Forensic Document Examiner at the Georgia Bureau of Investigation State Crime Laboratory. The summary indicates that Mr. Anthony will testify about the results of forensic analysis he performed on four questioned documents: a note beginning, "Bill Jr. We'll be back . . . "; a 3-page Highland Institute letter bearing writing on the reverse side of the last page beginning, "need to . . . "; and a torn map bearing two notes, both beginning with the word "please. . . ." The summary indicates that, using samples of writings known to be those of Defendant, Mr. Anthony will testify that he examined the questioned documents, Crime Lab items numbered 21A, 21B and 21C, and assessed the skill and overall appearance of the writing. In addition to discussing general handwriting features that are individual characteristics, Mr. Anthony will discuss individual features in the questioned writing that he considers to be of more significance or individual. Mr. Anthony will testify as an expert that (1) there are various similarities between the known samples of Defendant's writing and the questioned samples of writing, and (2) based on his forensic examination of the questioned writings, it is Mr. Anthony's opinion that Defendant probably prepared the writing on Crime Lab item number 21A and that Defendant prepared the writings on Crime Lab items numbered 21B and 21C.[2]

The Evidentiary Hearing

A. Testimony of Arthur T. Anthony

Anthony is a forensic document examiner with the Georgia Bureau of Investigation's Division of Forensic Sciences, known as the Georgia State Crime Lab ("GBI Crime Lab"). (T-45). His work involves examining questioned documents, and includes comparing identified handwriting samples with samples of handwriting of unknown origin. (T-61). He has worked in the field of forensic document examination for approximately 27 years, and has held the position of Supervisor of the Questioned Documents and Forensic Photography Section of the GBI Crime Lab for approximately 6 or 7 years. (T-46). He has examined thousands of documents, both as the primary examiner and as the peer reviewer of the work of his colleagues. (T-53-4, 57-8; Gov. Ex. 1, p.2). He holds a Bachelor of Science degree from Central Missouri State University, and his training in the area of forensic document examination began in the Questioned Documents Section of the FBI where he attended lectures and classes in the identification of writing and the detection of forgery, among other things. (T-46-47, 54). After working at the FBI for approximately 5 years, he worked at the Illinois State Crime Laboratory, where he apprenticed for approximately one year under the Chief Forensic Document Examiner for the Illinois State Police Crime Lab, Stephen McKasson. (T-47-48). During his apprenticeship, Anthony attended lectures and classes and took competency tests, which he successfully completed. (T-49). After 3 years at the Illinois Crime Lab, he began working with the GBI Crime Lab. (T-50).

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[2] As will be discussed below, Mr. Anthony testified during the Daubert hearing that he is now of the opinion that Crime Lab item number 21A *was* prepared by the Defendant and that another writing, identified as Crime Lab item number 21D, was also prepared by Defendant.

The GBI Crime Lab is accredited by the International Standards Organization (ISO). (T-58). According to Anthony, the GBI Crime Lab is the only crime lab in the United States that is accredited by ISO. The GBI Crime Lab is also certified by the American Society of Crime Laboratory Directors ("ASCLD") and must undergo annual self-audits and periodic inspection of its quality control and quality assurance facilities and its programs. (T-58-60).

Anthony is a member of the American Academy of Forensic Sciences and the American Society of Questioned Document Examiners, he has been certified by the American Board of Forensic Document Examiners (ABFDE) since 1984, and he is a member of the Southeastern Association of Forensic Document Examiners. (T-51-2). Anthony has published papers in peer-reviewed journals such as the *Journal of Forensic Sciences*, and he has presented papers at seminars and conferences of the American Academy of Forensic Sciences, the American Society of Questioned Document Examiners and the Southeastern Association of Forensic Document Examiners. (T-55).

Anthony has been qualified to testify in court approximately 175 times and he has testified at other hearings and/or depositions another 75 times. (T-55). He has previously been qualified as an expert in the field of forensic document examination in the Northern District of Georgia on a number of occasions. (T-55-56). One of those occasions was in United States v. Kirby, No. 1:01-CR-642-JTC, Northern District of Georgia, and the questioned writings included both hand-printed letters and a signature in cursive. (T-56). In that case, Anthony was found to be qualified to give testimony as a forensic document examiner. (T-56-57).

All of Anthony's work is subject to peer review by another document examiner within his lab. (T-60). The procedures Anthony follows in conducting his analysis of questioned documents are as follows: comparison, evaluation and verification. (T-60-61). When he first receives a questioned document, he determines whether the writing is sufficient in length and is sufficiently clear, and whether it is an original or a photocopy. He assesses the writing features in the questioned document. (T-61). He examines the known writings of a particular individual to determine whether they were all authored by one individual and then he assesses the characteristics in the sample of writing. (T-61). He compares and evaluates the handwriting features in the questioned and the known documents and if there are sufficient individual idiosyncracies or habit patterns present in the questioned and the known documents, then he can render an opinion on the positive side of the scale. (Id.). However, if there are significant differences between the two sets of writings, he can eliminate the questioned document. (T-61).[3] These procedures are "pretty much standard throughout the discipline," Anthony testified. (Id.). The Scientific Working Group for Forensic Document Examination (SWGDOC) procedures for document examination are essentially elaborations on the procedure outlined by Anthony for comparison of writings. (T-62, Gov. Ex. 20).

When he examines handwriting, he looks for common handwriting features shared by many people, such as common types of forms and letter forms of designs, and that he also looks for nuances and idiosyncracies. (T-63). In doing his handwriting examination, he uses hand magnifiers, stereo microscopes, infrared inspection equipment, ultraviolet light sources and an instrument that

[3] Anthony acknowledged that there is no specific number of similarities required for a document examiner to conclude that two writings were authored by the same person, and no specific number of dissimilarities to allow exclusion of common authorship. (T-100-102). Rather, these determinations depend on the subjective opinion of the document examiner, based on his training and experience. (Id.).

processes documents electrostatically for indented handwriting impressions. (T-63). In making his comparisons, he looks at rhythm and speed, the size of the writing, the height relationship of various letters and words, spacing between letters and words, placement of letters or marks or words in relationship to a line on paper, letter design or construction, connecting strokes, stroke direction, the paper and the writing instrument, the slant of the writing, the pen pressure and the pen direction. (T-64, 122-26).

Anthony testified that the basic tenet of the field of forensic document examination is that no two people write exactly alike. (T-65). It is a version of the theory of uniqueness, according to Anthony, which is

> that everything is unique and we, as individuals, are unique; therefore, the factors which go into our writing, such as eye/hand coordination abilities, our motor skills, our neural system are all individually unique to us and, therefore, we impart little idiosyncracies in our writing, those tell-tale signs that identify us as the writer of a particular signature or writing.

(Id.).

Anthony explained that the process of examining documents can result in a range of opinions. (T-62). While the American Society of Testing Materials uses a 9-category reporting scale which ranges from positive identification, to no conclusion, to positive elimination, with gradations in between, the GBI Crime Lab has modified that scale to a 7-category scale, which eliminates the "highly probable" on either side of the scale. (Id.).

Anthony examined the documents identified as Government's Exhibits 2-6 in this case. He explained that he followed the procedures in examining these documents that are followed in the field of forensic document examination. (T-69). He used Government's Exhibits 13 and 14, which were known to have been written by Defendant, for comparison purposes. (T-69-70). He prepared three reports in connection with his examination of the documents: a March 12, 2002 report (Gov. Ex. 7), an August 1, 2002 report (Gov. Ex. 8) and a November 13, 2003 report (Gov. Ex. 9). (T-72). In his initial report, Mr. Anthony expressed the opinion that Defendant prepared Government's Exhibits 4 and 5, which were two notes on a large topographical map, each beginning with the word "please" (Crime Lab No. 21C); Defendant probably prepared Government's Exhibit 2, a note beginning "Bill, Jr. we'll be back . . ." (Crime Lab No. 21A); and he could not reach a conclusion as to whether Defendant prepared Government's Exhibit 3, a note beginning "need to acquire . . ." (Crime Lab No. 21B). In connection with Government's Exhibit 3, Anthony requested additional cursive writing for comparison with that document, and he then conducted another review. (T-73-74). Upon further review, he concluded that Defendant prepared Government's Exhibit 3, and he wrote a report indicating that result. (T-74; Gov. Ex. 8). Finally, Anthony concluded that Defendant was the author of Government's Exhibit 6, a partial digital copy of a note (Crime Lab No. 28A), and wrote a report to that effect. (Gov. Ex. 9).

Using charts containing words taken from the questioned documents and words taken from the known documents, Anthony explained his opinions. The following are examples of his observations:

(1) The pattern of writing a lower case "p" beginning with a downward motion going below the imaginary line of writing and retracing back upward with the upper portion of the "p" formed in a triangular movement is repeated in both the questioned and the known document;

(2) The lower case "n" in the word "not" begins with a downward motion, moves upward to the first arch but is very high and angular in its formation of the valley in the center and moves out into the letter "o" with another angular upper portion. This habit appears in both the known and the questioned writing;

(3) The lower case "r" in the word "for" has a slight tic mark as it exits in both known and questioned writings;

(4) The downward stroke on the lower case "t" is curved and begins with a tic mark curving to the left and then back over to the right into the letter "o";

(5) The ampersand is made with an initial movement of a letter or a numeral 3, coming off with a drag stroke into the center portion and then moving downward and curving slightly to the right, a "highly unusual feature";

(6) The letter "A" in the printed word "THANKS" begins with a downward movement, curving into the upward movement into the pinnacle of the "A" coming down;

(7) The letter "E" in the word "PLEASE" is made initially with a formation similar to the letter "C," the center part is placed and then the upper part is placed, completing the letter form; It moves slightly to the left if you were to put a perpendicular line through the back of the "C";

(8) The slight tic mark or drag stroke in the "t" moving into the vertical down stroke of the "t" and the stoke of the "t" that connects with the "h" in the word "that" is made with an upward curving motion;

(9) The letter "t" in the word "that" has the cross bar lower than midpoint

on the staff or vertical motion.

(T-78-82). Anthony also testified that he found "very significant" something which "would be referred to as an ellipsis in grammar, in text, but this is not a true ellipsis, because it's at the end of sentences." (T-81). These three vertical movements in the form of period marks with the last one being heavier in its formation than the first two are "a habitual feature of the individual that's shared both in the questioned writing and also in the known writing, and that is something that I found to be highly, highly significant." (T-82). All of Anthony's work in this case was peer-reviewed by someone in his laboratory. (T-83).

B. Testimony of Kirsten Jackson

Jackson testified that she is a forensic document examiner with the U.S. Postal Inspection Service. (T-150-51). She has more than ten years' experience as a forensic document examiner. (Id.). Ms. Jackson holds a Bachelor's degree in psychology from the University of Virginia and a Master's degree in Forensic Science from George Washington University in Washington, D.C.. She took one full semester course in questioned document examination and questioned documents were also a part of the subject of some of the other comparative science courses she took. (T-151-52). Following her academic training, she trained in an apprenticeship program for approximately 3 years with the Virginia Division of Forensic Sciences under the supervision of retired qualified forensic document examiners from the FBI, the U.S. Postal Inspection Service and the U.S.

Army Crime Lab. (T-152). Her training entailed reading books and articles in the field of questioned documents, examining hundreds of cases involving thousands of writings, and attending courses in questioned document analysis as well as conferences and meetings. (Id.). She was tested on a periodic basis, and she successfully completed the apprenticeship and training program. (T-152-53). She became certified by the American Board of Forensic Document Examiners upon her successful completion of the written test, five practical examinations and an oral board. (T-153-54). Jackson has testified as an expert witness approximately thirty times. (T-157).

Jackson testified that the basic tenet of handwriting examination and identification is that no two writers share the same combination of handwriting characteristics, i.e. no two people write exactly alike. (T-168). Ms. Jackson testified about several efforts that have been made to test that proposition. First is an article entitled *Individuality of Handwriting*, 47 J. Forensic Sci. 1 (2002) by a Dr. Sargurn Srihari and others. (Gov. Ex. 19). The abstract of the article states that the authors undertook a study "to objectively validate the hypothesis that handwriting is individual" and that "the ability to determine the writer with a high degree of confidence was established." (Id.).

Jackson also discussed three studies which were done to determine if the handwriting of fraternal and identical twins could be distinguished.[4] (T-166). Of the three studies she mentioned, all authors and examiners determined that it is always possible to distinguish the handwriting of identical and fraternal twins given a sufficient amount of writing. (T-166-67). These studies support the theory that no two writers in the world share the same combination of handwriting characteristics. (T-168).

Jackson identified the standards for the field of forensic document examination that were developed by the Scientific Working Group for Questioned Documents ("SWGDOC"), a group sponsored by the FBI. (T-169; Gov. Ex. 20). These guidelines have been submitted to the American Society for Testing and Materials (ASTM), which provides a forum for organizations to develop voluntary consensus standards for their respective professions. (T-169). According to Ms. Jackson, the standards have been peer-reviewed by the questioned document community at the SWGDOC level, and at the ASTM level. Jackson identified Government's Exhibit 21, which is the ASTM standard terminology guidelines for expressing conclusions of forensic document examiners. (T-170). Jackson testified that other examples of the standards in the field of forensic document examination include ASCLD, the group which accredits laboratories after determining that they meet specific standards, and the ABFDE, which certifies forensic document examiners. (T-169-70).

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[4] Mary S. Beacom, *A Study of Handwriting by Twins and Other Persons of Multiple Births*, 5 J. Forensic Sci. 121 (1960)(Gov. Ex. 16); D.J. Gamble, *The Handwriting of Identical Twins*, 13 Can. Soc. Forens. Sci. J. 11 (1980)(Gov. Ex. 17); David Boot, *An Investigation into the Degree of Similarity in the Handwriting of Identical and Fraternal Twins in New Zealand*, 70 J. Amer. Soc. of Questioned Document Examiners 70 (1998)(Gov. Ex. 18).

Jackson testified about various kinds of peer review that occur within the field of forensic document examination. (T-176). She testified that there is scholarly peer review, which includes journals and published articles that are relevant to the field of questioned document examination and are peer reviewed; peer review in the form of ASCLD accreditation in which inspectors determine if a laboratory meets specific standards prescribed by ASCLD; the ABFDE review for an individual examiner to determine whether he or she meets specific standards in the field; and peer review of case work in the laboratory by colleagues. (T-176-77).

According to Jackson, the field of forensic document examination has been accepted by the American Academy of Forensic Sciences, which was established in 1948 and is the only national multi-disciplined forensic organization in the country. In addition, the International Society of Identification has a Questioned Documents Section, and there are regional organizations in the United States that have Questioned Document Sections, such as the Mid-Atlantic Association of Forensic Scientists, the Midwestern Association of Forensic Scientists, etc. (T-177-78). There are also international societies that have forensic document examiner sections, such as the Canadian, Australian, New Zealand, British and other societies. (T-178). Furthermore, a number of universities have forensic science degrees and within their curricula have questioned document courses. (T-178).

Among these is George Washington University which has a Masters program in Forensic Science, the University of Alabama at Birmingham, and Oklahoma State University. (T-178).

Jackson testified about studies performed by Dr. Moshe Kam to determine if there is a difference in the abilities of document examiners and laypersons to match unknown and known documents. First was Dr. Kam's pilot study, which led to his publication, Kam, Wetstein & Conn, *Proficiency of Professional Document Examiners in Writer Identification*, 39 J. Forensic Sci. 5 (1994)(Gov. Ex. 22). The main finding of this study was "that the professional document examiners performed significantly better than the members of the control group." (See Abstract, Gov. Ex. 22). Next came a larger study resulting in the publication, Kam, Fielding & Conn, *Writer Identification by Professional Document Examiners*, 42 J. Forensic Sci. 778 (1997)(Gov. Ex. 23). (T-179). This study found that forensic document examiners incorrectly identified a writer with a questioned writing 6.5% of the time while laypersons incorrectly identified the writer 38.3% of the time. (T-179-80). With respect to correct identifications, the percentages were very close. (T-180). Jackson also testified about a 1998 study by Dr. Kam which addressed motivation of laypersons' abilities to identify the author of a document. (T-182). This study resulted in the publication of Kam, Fielding & Conn, *Effects of Monetary Incentives on Performance of Nonprofessionals in Document-Examination Proficiency Tests*, 43 J. Forensic Sci. 1000 (1998)(Gov. Ex.

24).

Jackson identified an article published in November 2003 in the Journal of Forensic Sciences regarding forensic document examiner proficiency in examining hand-printing. (Gov. Ex. 25)(T-183). Written by Dr. Moshe Kam and another, that article is entitled, *Writer Identification Using Hand-Printed and Non Hand-Printed Questioned Documents.* (T-184)(Gov. Ex. 25). The hand-printing study shows that laypeople erred 40% of the time, whereas professional FDE's erred at the rate of less than 10% in matching a questioned writing to a known writing. (T-212). According to the article (Gov. Ex. 25), the correct identification rate of hand-printed documents for forensic document examiners is 88.5% and the incorrect association rate is 9.3%, while the correct identification rate for laypersons is 93.85% and the incorrect association rate is 40.45%. (T-225-26, 213-14).

C. Testimony of Professor Mark Denbeaux

Professor Denbeaux testified that he is a professor of law at Seton Hall Law School where he has taught since 1972. He graduated from the College of Wooster and NYU Law School, and he worked for the Legal Services Program in New York City before he began teaching. (T-233-34). Denbeaux teaches evidence, including a course on the problems of expert witnesses. (T-234). Along with Professors Michael Risinger and Michael Saks, Denbeaux authored an article entitled *Exorcism of Ignorance as a Proxy for Rational Knowledge: The Lessons of Handwriting Identification Expertise,* U. Pa. L. Rev. (1989) (hereinafter "the *Exorcism* article"). (T-239; Def. Ex. 1). The article examines the results of the Forensic Science Foundation's[5] proficiency studies[6] of handwriting examiners in criminal laboratories. (Id.). According to Denbeaux, the results of those studies showed that handwriting experts were right 57% of the time when they gave an opinion, and wrong 43% of the time when they gave an opinion. (T-239). Before they wrote the *Exorcism* article, the proficiency testing results from the American Academy of Forensic Sciences, which came out in the 1970's and 1980's, were virtually the only data Denbeaux and his colleagues found concerning the proficiency of forensic document examiners. (T-241-42). Denbeaux testified that a central conclusion of the article was that there should be further testing and that there should be testing of document examiners against a control group of laypeople. (T-247).

Denbeaux accepts the principle of uniqueness, i.e., that no two people write alike. (T-272). He testified that Dr. Kam's studies have shown that handwriting experts are better at not wrongly associating a writer with a questioned document than are laypersons. (T-294). He acknowledged that he is not a forensic document examiner, a statistician or a mathematician. (T-288).

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[5] The Forensic Science Foundation is the proficiency testing arm of the American Academy of Forensic Sciences.

[6] These studies were conducted in 1975 and 1984-87. See Def. Ex. 1.

D. **Testimony of Moshe Kam, Ph.D.**

Dr. Kam is a tenured professor of electrical and computer engineering at Drexel University in Philadephia, Pennsylvania. (T-321). He did his undergraduate studies at Tel-Aviv University in the area of electrical and electronics engineering with emphasis on communication in statistical and detection theory. He obtained an M.S. and a Ph.D. at Drexel University in the area of statistical communication theory. (Id.). He has extensive education in statistics and probability. (T-323). Kam's current duties include education, teaching and research. (T-322). He conducts research primarily in detection, estimation and pattern recognition, which is the art and science of studying how humans and machines recognize and process patterns. (Id.). He has approximately 35 peer-reviewed journal manuscripts in print or accepted for publication and he has presented more than 100 papers at conferences. (T-324). He has published 5 major papers in the Journal of Forensic Sciences since 1994, including one that came out in November, 2003. (T-325-26). Kam testified that he has testified in Daubert hearings and in several trials as an expert on pattern recognition and proficiency of forensic document examination. (T-326-27).

Kam testified that he decided to research the performance of forensic document examiners versus that of laypersons after he read the *Exorcism* article by Denbeaux, et al. (T-328). He explained that the *Exorcism* article referred to a number of studies of the Forensic Science Foundation which he found to be flawed or to have no bearing on the issue of proficiency of forensic document examiners, and he therefore undertook his own studies. (T-330-31). First, he did a pilot study using 10 graduate students and 7 document examiners. (T-333). He found that the performance of the best lay person was nowhere near the performance of the document examiner. (T-336; see Gov. Ex. 22). He undertook a larger study after that which involved about 105 document examiners and about 41 lay persons. (T-338; see Gov. Ex. 23). The results of this second study revealed that document examiners erroneously declared in about 6.5% of the cases that two documents were written by the same person, while laypersons made the same erroneous declaration in about 38% of the cases. (T-345). The conclusion Kam reached from his testing was that "for better or worse, there is a skill." (T-346). He found that both document examiners and laypersons had about an 87% success rate in finding matches correctly. (T-345). Kam's conclusion was that "document examiners on the aggregate were much better than . . . laypersons because of the fact that document examiners had a balance, whereas the laypersons tended to make many mistakes of erroneous matching." (T-346). In a third paper Dr. Kam published after a study designed to address incentives that could affect results, Dr. Kam found that laypersons correctly matched documents 81% of the time, whereas they made incorrect matches 22% of the time. (T-350; see Gov. Ex. 24).

Dr. Kam's most recent paper,[7] entitled *Writer Identification Using Hand-*

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[7] Dr. Kam and three colleagues also published an article prior to his study on hand-printed documents which is entitled *Signature Authentication by Forensic Document Examiners* in the Journal of Forensic Sciences in 2001. It received little attention during the Daubert hearing in this case.

Printed and Non-Hand-Printed Questioned Documents, uses the data developed in 1997 and separates it into 5 categories, i.e., all documents, hand-printed, non-hand-printed, cursive, non-cursive and compares the abilities of document examiners and laypersons to correctly identify the author of questioned documents in each subset. (T-352). His findings were that in all categories, the proficiency of forensic document examiners in writer identification was superior to that of laypersons. (T-353).

E. Testimony of Carole E. Chaski, Ph.D.

Defendant called Dr. Carole E. Chaski, who is Executive Director of the Institute for Linguistic Evidence. Chaski has a Bachelor's degree in Ancient Greek and English, a Master's of Education in the Psychology of Reading, another Master's in Linguistics and a Ph.D. in Linguistics. (T-381). She has worked in the area of forensic linguistics, which she described as a field that is "relatively young and developing." (T-386, 387). She has been involved in cases in which she used her forensic linguistic technique to identify an individual as the potential author of a written document. (T-388-89, 390).

Chaski testified that the error rates of forensic document examiners, as determined through Dr. Kam's testing, include making a false positive and making a false negative, and that these two must be combined. (T-405-06). The combined error rate for forensic document examiners shows them to be correct approximately 80% of the time, she testified. (T-406-07). She did not provide the combined error rate for laypersons pursuant to Dr. Kam's studies.

F. Testimony of Michael J. Saks, Ph.D.

Professor Saks testified that he is a professor at the University of Arizona, primarily in the law school with a secondary appointment in the Department of Psychology. (TS-6).[8] He received his undergraduate degree from Penn State and a Ph.D. in Experimental Social Psychology from Ohio State University. (Id.). His Ph.D. work involved evaluation of research, including assessing research methodology. (TS-10-11). He has an MSL degree from Yale Law School.[9] (TS-7). He has held various teaching posts and has taught research methodology and statistics for judges. (TS-7). One of his primary areas of work involves science as it is used in courts. (TS-8). He has testified in eight or nine Daubert hearings previously. (TS-32).

Saks is one of the authors of the *Exorcism* article. According to Saks, as of the time of the publication of the *Exorcism* article in 1989, there had been no research on the issue of whether two people have indistinguishably similar handwriting or whether one person never writes the same way twice. (TS-17). In Dr. Saks' view, the studies in the field of forensic document examination that had been conducted as of the late 1980's were less than satisfactory. (TS-21-22). He was critical of the fact that even the research carried out subsequent to the

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[8] The transcript of the deposition testimony of Prof. Saks will be referred to as TS-___.

[9] An MSL is the degree resulting from a one-year program for people from other fields.

Exorcism article does not demonstrate that document examiners can reach 100% consensus on the right answer. (TS-23-24).

Dr. Saks testified that, based on the 1986 and 1999 Forensic Science Foundation proficiency studies of document examiners involving printing,[10] "error rates have run as high as 54%. Of that 54%, 45% of those errors were false positive errors . . . 9% . . . were false negatives . . . [and] 32% . . . were inconclusive." (TS-33-34). According to Saks, the 2002 analysis performed by Dr. Kam during the middle of the trial in United States v. Hidalgo, 229 F.Supp.2d 961 (D. Arizona 2002), which was later the basis for Professor Kam's 2003 article (Gov. Ex. 25), however, shows that the error rate is zero. (TS-34). Saks testified that he has not seen Dr. Kam's 2003 publication, which is based on the 2002 analysis, but he is critical of Dr. Kam's analysis because it included a mixture of cursive and printing. (TS-35, 37).

Saks testified that he has found no research that supports the hypothesis that no two people write exactly the same. (TS-43). He has seen the Srihari study, and he testified that its bottom line conclusion was that not every writing could be successfully distinguished from every other writing. (TS-44). With respect to the twin studies that have been performed in an effort to prove the principle of uniqueness, Saks testified that the literature of document examination assumes

[10] The undersigned notes that earlier in his testimony, Saks was critical of the Forensic Science Foundation's proficiency studies for a number of reasons involving lack of proper controls, including the fact that they were voluntary tests, sometimes several examiners worked together on one test, etc. (TS-18-19).

that a person's writing skills and characteristics are learned rather than a matter of genetics and he therefore does not credit those studies. (TS-44-45). Dr. Saks was asked to consider the work performed by Dr. Kam, the Australian research performed by Found and Rogers and another study known as the Galbraith, Galbraith and Galbraith study to address the question whether the research shows that forensic document examiners perform better than lay persons when it comes to correctly matching a known and a questioned writing. (TS-46-47). Saks' answer was that the research is flawed because there is a risk that the differences observed are the result of differences in motivation to perform rather than ability. (TS-48). Secondly, the Kam study showed that laypeople do as well as handwriting experts in making the identification. (TS-48). They differ, he testified, in that the experts have a lower false positive error rate. (TS-49).

Saks acknowledged that he is not a lawyer and does not have a J.D. (TS-54). He also acknowledged that he is not a forensic document examiner (TS-55) and that he has no training in that field. (TS-56). Dr. Saks acknowledged the consistent finding appearing in the Kam, Galbraith, and Australian studies that forensic document examiners are less likely than laypersons to wrongly associate questioned documents with known documents. (TS-98).

Discussion

Defendant contends that Anthony's proposed testimony should be excluded pursuant to Daubert, Kumho Tire Co. v. Carmichael, 526 U.S. 137 (1999) and

Fed. R. Evid. 702 because the field of forensic document examination is not an expertise under Rule 702. Defendant argues that there is no scientific or technical support for the central tenet held by forensic document examiners, i.e., that no two people write exactly alike (the principle of uniqueness). He contends that the Government has not demonstrated the adjunct to the main theory of uniqueness, which is the idea that no one person writes in exactly the same way every time. Defendant argues that there are no criteria to guide a forensic document examiner when making the distinction between a variation in a single person's writing and a substantial difference between known and questioned writings which would allow the examiner to determine that the writings were written by two different people. Defendant is also critical of the attempts that have been made to prove error rates on the part of forensic document examiners. And finally, Defendant is critical of the sparse information in the area of document examination as it relates to hand-printed writings.

Rule 702 provides:

> If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

Rule 702 was amended in 2000 in response to the Supreme Court's decisions in Daubert and Kumho Tire. Daubert held that the version of rule 702 then in existence[11] imposed upon the trial court a special obligation to ensure that any and all scientific testimony was not only relevant, but reliable. Daubert, 509 U.S. at 589.

"As the Supreme Court recognized in Daubert v. Merrell Dow Pharms., Inc., Rule 702 plainly contemplates that the district court will serve as a gatekeeper to the admission of scientific testimony. 509 U.S. 579, 589 (1993). . . ." Quiet Technology DC-8, Inc. v. Hurel-Dubois UK Ltd., 326 F.3d 1333, 1340-41 (11th Cir. 2003)(citation omitted). The court explained:

> This responsibility is identical when the court is presented with a proffer of expert technical evidence. Kumho Tire, 526 U.S. at 147, 119 S. Ct. at 1174. In either case, we engage in a three part inquiry to determine the admissibility of expert testimony under Fed. R. Evid. 702. Specifically, we must consider whether (1) [T]he expert is qualified to testify competently regarding the matters he intends to address; (2) the methodology by which the expert reaches his conclusions is sufficiently reliable as determined by the sort of inquiry mandated in Daubert; and (3) the testimony assists the trier of fact, through the application of scientific, technical, or specialized expertise, to understand the evidence or to determine a fact in issue.

Id. (citing City of Tuscaloosa v. Harcros Chems., Inc., 158 F.3d 548, 562 (11th Cir. 1998), cert. denied, 528 U.S. 812 (1999))(other citations omitted). The court in Quiet made clear that while "there is some overlap among the inquiries into an expert's qualifications, the reliability of his proffered opinion and the helpfulness of that opinion, these are distinct concepts that courts and litigants must take care not to conflate." Id. "Faced with a proffer of expert scientific testimony . . . the trial judge must determine at the outset, pursuant to Rule 104(a), whether the expert is proposing to testify to (1) scientific knowledge that (2) will assist the trier of fact to understand or determine a fact in issue. This entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and if whether that reasoning or methodology properly can be applied to the facts in issue." Quiet, 326 F.3d at 1341 (quoting Daubert, 509 U.S. at 592-93). It is the duty of the trial court to "determine, at the outset, whether the purported expert is qualified to express a reliable opinion based on sufficient facts or data and the application of accepted methodologies." Wolf v. Ramsey, 253 F.Supp.2d 1323, 1341 (N.D.Ga. 2003)(citations omitted).

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[11] The prior version of Rule 702 stated:

> If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise.

A non-exhaustive list of factors for courts to consider in ascertaining the reliability of a particular scientific expert opinion includes "(1) whether the expert's theory can be and has been tested; (2) whether the theory has been subjected to peer review and publication; (3) the known or potential rate of error of the particular scientific technique; and (4) whether the technique is generally accepted in the scientific community." Quiet, 326 F.3d at 1341 (citing McCorvey v. Baxter Healthcare Corp., 298 F.3d 1253, 1256 (11th Cir. 2002) and Daubert, 509 U.S. at 593-94). A fifth factor is "the existence and maintenance of standards controlling the technique's operation. Daubert, 509 U.S. at 594.

The Court in Daubert made clear that these factors do not constitute a "definitive checklist or test." 509 U.S. at 593. It explained that a trial court's inquiry into the admissibility of expert testimony must be flexible, and that the focus is upon reliable principles and methodology, not conclusions. Id. at 594-95. However, the Court also made clear that a court is empowered to conclude that the underlying data does not support the conclusion reached, and thus exclude the testimony. General Electric Co. v. Joiner, 522 U.S. 136, 146 (1997).

The Court in Kumho Tire instructed that a trial court's "gatekeeper" obligation applies to assessing the reliability of non-scientific expert testimony as well. Kumho Tire, 526 U.S. at 147. In that case, the Court reiterated that the reliability test is flexible, and that the so-called Daubert factors are not dispositive in every case; they "neither necessarily nor exclusively appl[y] to all experts or in every case." Id. at 141. Further, the Court explained that the list of considerations was meant to be helpful, not definitive. Id. at 151. It recognized that reliability may focus as well on personal knowledge and experience, depending upon "the particular circumstances of the particular case at issue." Id. at 150-51. That is, a non-scientific expert may be qualified to render an opinion by virtue of "knowledge, skill, experience, training or education.' " Fed. R. Evid. 702, Advisory Committee Notes to the 1972 Proposed Rules. The undersigned notes that the Kumho Tire opinion expressly cited the Solicitor General's *amicus* brief in that case and pointed out its citation to cases involving, among other experience-based experts, experts in handwriting analysis. Kumho Tire, 526 U.S. at 150. Thus, this Court's gatekeeping responsibilities apply, as here, where the expert testimony is based upon skill-or experience-based observation. United States v. Majors, 196 F.3d 1206, 1215-16 (11th Cir. 1999)(approving admissibility of expert testimony from FBI financial analyst who "possessed special knowledge and skill not available to the ordinary witness."), cert. denied, 529 U.S. 1137 (2000). And, in applying the teachings of Daubert, Kumho Tire directed that courts were to apply the Daubert consideration to the extent "they are reasonable measures of the reliability of expert testimony." Kumho Tire, 526 U.S. at 152.

In addition, the Committee Notes following the 2000 amendments to Rule 702 observed that a review of the cases decided after Daubert demonstrated that the rejection of expert testimony was the exception rather than the rule, noting the Daubert Court's admonition that, "Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." Daubert, 509 U.S. at 596.

" 'The burden of laying the proper foundation for the admission of expert testimony is on the party offering the expert, and admissibility must be shown by a preponderance of the evidence.' " Wolf, 253 F.Supp.2d at 1342, quoting Allison v. McGhan Med. Corp., 184 F.3d 1300, 1306 (11th Cir. 1999). Thus, the government bears the burden on the admissibility of Anthony's testimony.

Applying the Rule 702 and Daubert/Kumho Tire factors, the Court will evaluate whether the government has met its burden to show that Anthony's proposed testimony is admissible.

1. Is Mr. Anthony qualified to testify competently to the matters he intends to address?

The undersigned concludes that, based on his knowledge, skill, experience and training, Anthony is qualified to testify in the area of document examination. The evidence presented at the hearing demonstrates without dispute that Mr. Anthony has developed extensive knowledge and considerable skills in the area of forensic document examination. He has trained in the methods of examining questioned documents which are the methods accepted by others in the field. He has worked in the field of forensic document examination for approximately 27 years and he has examined thousands of documents as the primary examiner and as the peer reviewer of other document examiners' work. The GBI Crime Lab, which he heads, has been certified by the American Society of Crime Laboratory Directors and the International Standards Organization, both of which require standard procedures and protocols and perform periodic audits of the Forensic Documents Section. He has been certified by the American Board of Forensic Document Examiners since 1984. He has been qualified as an expert in the field of forensic documentation in this District on numerous occasions, most recently in United States v. Kirby, No. 1:01-CR-642-JTC. The undersigned concludes that

Anthony is qualified to offer expert opinion testimony as to forensic document examination, to the extent such testimony is allowed.

2. Is the methodology by which Mr. Anthony reached his conclusions sufficiently reliable?

Consideration of this issue requires the Court to identify the conclusions or opinions to which Anthony will testify. As indicated by the summary of Anthony's testimony [Doc. 115] and by Anthony's testimony during the Daubert hearing, the Government intends to have him testify about similarities he has found between the questioned documents and the known documents and about his conclusion that Defendant is the author of the questioned documents. Furthermore, those opinions will involve evaluation of both cursive and hand-printed writings. Thus the Court must evaluate the reliability of each aspect of Anthony's proposed testimony. See City of Tuscaloosa v. Harcros Chems., 158 F. 3d 548, 566 (11th Cir. 1998); Wolf v. Ramsey, 253 F.Supp.2d 1323, 1345 (N.D.Ga. 2003).

As noted above, Defendant's motion to exclude Anthony's testimony is based not on the argument that Anthony has misapplied the principles of a reliable field, i.e. that he has "misused a method that, in the abstract, is reliable." Quiet, 326 F.3d at 1345. Rather, it is that the field of document examination itself is unreliable. In light of the Eleventh Circuit's decision in United States v. Paul, 175 F.3d 906, 910 (11th Cir. 1999), the undersigned is bound to find that the field of document examination is reliable, at least for some purposes. [12] Magistrate Judge Alan Baverman's Report and Recommendation on Defendant's Motion to Preclude Use of Handwriting Analysis Testimony in United States v. Kirby, Criminal Action No. 1:01-CR-642-JTC, U.S.D.C.N.D.Ga (May 9, 2002)("Kirby") recommended that the same expert involved in this case, Mr. Arthur T. Anthony, be allowed to testify both to similarities between the defendant's known writings and the questioned documents and to his opinion that the defendant was the author of the questioned documents. The documents at issue contained both cursive and hand-printed writing. Kirby lends support to the view that Anthony should similarly be allowed to testify in this case. Upon independent application of the Daubert factors in the flexible manner urged by both Daubert and Kumho Tire, the undersigned rejects Defendant's argument to the contrary.[13]

Testing

The first Daubert inquiry is, can the expert's methodology or theory be, or has it been, tested, i.e., can the expert's theory be challenged in some objective sense, or is it instead simply a subjective, conclusory approach that cannot reasonably be assessed for reliability? The Court concludes that the government's evidence shows that Anthony's methodology and the underlying theory of document examination can reasonably be assessed for reliability.

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[12] It is not clear in the Paul decision whether the handwriting expert testified to his opinion that Paul was the author of the questioned document or whether he just "specifically identified points of comparison that he recognized between the writing of the extortion note and the handwriting examples that Paul provided" before the jury. 175 F.3d at 911. In Wolf, 253 F. Supp.2d at 1347-48, a post-Paul decision which cites Paul, Judge Carnes of this court ruled that a handwriting expert would be allowed to testify to marked differences and unusual similarities between the writing of an identified author and a questioned document but could not testify to his opinion on authorship because he "has not demonstrated a methodology whereby he can draw a conclusion, to an absolute certainty, that a given author wrote the [questioned writing]").

[13] The Supreme Court has clearly stated that "the test of reliability is flexible and Daubert's list of specific factors neither necessarily nor exclusively applies to all experts in every case. Rather, the law grants a district court the same broad latitude when it decides how to determine reliability as it enjoys in respect to its ultimate reliability determination." Kumho Tire, 526 U.S. at 141.

Anthony explained the methodology he uses in examining questioned documents, including the documents at issue in this case. In Kirby, Anthony explained that one aspect of that methodology is that he looks for and compares style of writing, i.e., cursive versus printing, in the known and the questioned documents. (See Kirby, p. 8, item 13). Anthony testified that he follows the methodology that is generally accepted by forensic document examiners, i.e. the standard protocol in the field. It is consistent with that employed by Kirsten Jackson, the other document examiner who testified, and with the SWGDOC guidelines. (Gov. Ex. 20). It is substantially the same as the method found to be reliable in United States v. Velasquez, 64 F.3d 844, 850-51 (3rd Cir.1995) and United States v. Gricco, No. CR. A. 01-90, 2002 WL 746037, *3 (E.D.Pa. April 26, 2002). Defendant has not provided evidence demonstrating that Anthony's principles or methods were faulty or unreliable.

As to the theories underlying forensic document examination, the Court understands Defendant's complaint to be not that the doctrine of uniqueness is wrong, but only that there has been no definitive test proving it. The Court finds, to the contrary, that there is sufficient support for the theory of uniqueness as demonstrated in the twin studies (Gov. Ex. 16-18) and the Srihari study (Gov. Ex. 19). See also Gricco, 2002 WL 746037 at *4 & n.6 and United States v. Starzecpyzel, 880 F.Supp. 1027, 1034-36 (S.D. N.Y. 1995).[14] Indeed, Defendant's expert, Professor Denbeaux, accepts the theory of uniqueness. Finally, the undersigned agrees with Judge Alan J. Baverman that "there is nothing radical about the principle of uniqueness, in any of its various formulations. . . . Common sense and experience teach that there are vast varieties of styles and mannerisms of writing, but that certain habits are developed by individuals over time." Kirby, at 26-27.

Moreover, as pointed out in Paul, Anthony's points of comparison as well as his ultimate conclusion can be readily tested by the jury's conducting its own comparison and reaching its own conclusion as to who authored the unknown documents. Paul, 175 F.3d at 911. There is nothing about forensic document examination which is inherently untestable. Starzecpyzel, 880 F.Supp. at 1036.

Peer Review

The second inquiry under Daubert is whether the technique or theory has been subject to peer review and publication. While the Government has not shown that the field of document examination has been subjected to "peer review by disinterested parties, such as academics," United States v. Saelee, 162 F.Supp.2d 1097, 1103 (D. Alaska 2001), the Government offered evidence, through Ms. Jackson, that peer review of a sort does occur in the field. Examples of such peer review are peer review by others in the field of journals and published articles that are relevant to the field of document examination; the ASCLD certification of crime labs; the ABFDE review for certification of individual examiners; and peer review of case work in the laboratory by colleagues.

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[14] Starzecpyzel held that forensic handwriting examination is not scientific evidence under Daubert, but was nonetheless admissible under Fed. R. Evid. 702 as technical or other specialized knowledge.

The Saelee court and other judges who have prohibited expert handwriting analysis testimony all have faulted the alleged absence or inadequacy of peer review as a ground for excluding such testimony.[15] The undersigned agrees with Judge Baverman that the fact "[t]hat generally only forensic document examiners write articles about the subject is neither surprising nor troubling. Forensic document examiners, of course, would have the greatest self-interest in examining and explaining their work. . . . The lack of so-called independent scholarly peer review is of no moment." Kirby, at p. 34.

It appears that the lab certification and individual certification procedures do involve critical evaluation to determine whether certain standards have been met. As for the peer review of Anthony's actual work, however, the evidence was

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15 As explained in Saelee:

> The field of handwriting comparison also suffers from the lack of meaningful peer review. As [the proffered expert] testified, some articles are presented at professional meetings for review; nonetheless, there is no evidence that any articles are subjected to peer review by disinterested parties, such as academics.

Saelee, 162 F.Supp.2d at 1103.

that a subordinate with substantially less experience than Anthony reviews his work. (T-60). This is not critical peer review.

The Court finds that the absence of peer review in the traditional sense does not render Anthony's testimony inadmissible, however. The Supreme Court has instructed that no one Daubert factor is controlling, and the Eleventh Circuit has noted that undergoing peer review itself is not dispositive to admissibility. Allison v. McGhan Medical Corp, 184 F.3d 1300, 1313 (11th Cir. 1999)("Peer review is significant under Daubert because 'scrutiny of the scientific community is a component of "good science," in part because it increases the likelihood that substantive flaws in methodology will be detected.' But if peer review alone was dispositive, then the Frye standard of general acceptability in the scientific community would have remained adequate."[16] (citation omitted)). The Court concludes that the fact that peer review of Anthony's work is inadequate in this or other cases does not make Anthony's testimony inadmissible. It only provides more material for cross-examination by the defense.

Error Rate

The third Daubert inquiry is what is the known or potential rate of error of the technique or theory when applied. The opinions critical of document examination testimony also fault the supposed lack of proof of error rates of professional examiners. See, e.g., Saelee, 162 F.Supp.2d at 1103; United States v. Fujii, 152 F.Supp.2d 939, 940-41 (N.D. Ill. 2000).

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[16] The "general acceptance" test of Frye v. United States, 293 F. 1013 (D.C. Cir. 1923) was supplanted by Daubert.

The evidence before the Court demonstrates that laypersons make mistakes in comparing handwriting about six times more often than trained forensic document examiners (38.6% for laypersons compared to 6.5% for document examiners.). Another important statistic for purposes of this case is Kam's conclusion that in examining hand printing for purposes of identifying authorship, the performance of professional document examiners is always superior to that of laypersons: the statistics showed that laypersons had a 40.45% rate of incorrect identification of someone as the author of a questioned document while professional document examiners made incorrect identifications at the rate of 9.3%. The rate of correct identification was 93.85% for laypersons and 88.5% for professionals. Quite clearly, for this case, a heightened ability *not* to incorrectly identify someone as the author of an incriminating writing is of great importance. Kam's studies lead to the conclusion that the expert testimony of professional document examiners, as it relates to the identification of the writer of both hand-printed and handwritten documents, is generally reliable.

The undersigned agrees with Judge Baverman that Professor Denbeaux is not qualified to assert an opinion as to the accuracy of Kam's methodology for testing the error rate of professional forensic document examiners versus the error rate of laypersons. Kirby, at p. 33. As for Professor Saks' testimony, it appears that he "misunderstands Daubert to demand unassailable expert testimony." United States v. Mooney, 315 F.3d 54, 63 (1st Cir. 2002). The court in Mooney explained, however, that

> Daubert does not require that the party who proffers expert testimony carry the burden of proving to the judge that the expert's assessment of the situation is correct. . . . It demands only that the proponent of the evidence show that the expert's conclusion has been arrived at in a scientifically sound and methodologically reliable fashion.

Id. (citing Ruiz-Troche v. Pepsi Cola of P.R. Bottling Co., 161 F.3d 77, 85 (1st Cir. 1998)).

Standards and Controls

The fourth Daubert inquiry concerns the existence and maintenance of standards and controls. The Court also finds that there are adequate standards and controls in the field. "[T]he task of document examination is inherently transparent: an opponent of the expert's conclusion as well as the jury will be able to make an independent examination of not only the ultimate conclusions of an examiner, but also the raw material which he or she used to reach the conclusion. In effect, the identical routine of the examiner can be repeated in open court." Kirby, at p. 36. See also United States v. Crisp, 324 F.3d 261, 271 (4th Cir. 2003)("[T]he role of the handwriting expert is primarily to draw the jury's attention to similarities between a known exemplar and a contested sample. Here, [the expert] merely pointed out certain unique characteristics shared by the two writings. Though he opined that [the defendant] authored the Note in question, the jury was nonetheless left to examine the Note and decide for itself whether it agreed with the expert.").

In addition, Anthony follows a methodology that is followed by others in the field, a methodology which is consistent with published guidelines for the field. Daubert instructed that the focus in evaluating the "validity . . . of the principles that underlie a proposed submission" is on "principles and methodology," not conclusions. Daubert, 509 U.S. at 594-95. While it is true that neither Anthony nor Ms. Jackson, the other document examiner who testified, utilizes any objective numerical scale or similar guide, that does not make a forensic document examiner's testimony any less reliable than that of any other skill, knowledge or experience-based expert. Kirby, at 36-7. "The lack of a numerical scale does not convert Anthony's methodology or conclusions into mere 'subjective belief or unsupported speculation,' as prohibited by Daubert. See id. at 590." Kirby, at p.37. But see Wolf, 253 F.Supp.2d at 1347.

General Acceptance

The final Daubert inquiry is whether the technique or theory has been generally accepted in the scientific community. While there is no "scientific community" at issue in this case, the field of forensic document examination is a recognized discipline with standard methodologies applied throughout the field. Jackson testified that the American Academy of Forensic Sciences, a national multi-discipline forensic organization established in 1948, has accepted the field of forensic document examination. Moreover, there are regional organizations, such as the Mid-Atlantic Association of Forensic Scientists and the Midwestern Association of Forensic Scientists, that have questioned documents sections. In addition, there are international societies with forensic document examiner sections. The technique and theory of forensic document examination has widespread acceptance as a skill, experience, training and knowledge-based discipline.

The undersigned concludes that the field of forensic document examination is an area of expertise based on skill, knowledge and experience and that it includes both cursive and hand-printed documents. While the Government's proof does not fit precisely into every Daubert criterion, the Court concludes, in accordance with the courts in Crisp; Mooney; United States v. Jolivet, 224 F.3d 902 (8th Cir. 2002) and numerous district courts that Anthony's testimony is reliable and that he "employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." Kumho Tire, 526 U.S. at 152; Allison, 184 F.3d at 1312. Defendant's objections go to the weight and not the admissibility of Anthony's testimony.

3. Will the testimony of Mr. Anthony assist the jury?

All five of the documents in question go to central issues in this case, including premeditation, aggravation and mitigation.[17] The testimony of a

[17] See 18 U.S.C. § 3592.

properly qualified forensic document examiner about the similarities and/or differences between the questioned documents and Defendant's known writing samples and about who prepared the questioned documents is highly relevant to the issues the jury must decide.

Furthermore, Mr. Anthony's proposed testimony can offer something "beyond the understanding and experience of the average citizen." Paul, 175 F.3d at 911 (quoting United States v. Rouco, 765 F.2d 983, 995 (11th Cir. 1985), cert. denied, 475 U.S. 1124 (1986)). Defendant has argued that a jury could observe similarities and differences between the known documents and the questioned documents. "However, even assuming a jury had the time, proper instruction and equipment, the jurors' observations just could not match the years of experience of one whose life's work encompasses the field, and the consequent ability of such an individual to discern subtle but important variations and differences in handwriting patterns." Kirby, at p. 29. As Judge Baverman observed, "while Anthony's methodology of examining documents seems simple and straightforward, it is Anthony's layer of knowledge and experience that gives the methods employed real meaning and effect." Kirby, at p. 27.

Conclusion

For the foregoing reasons, the undersigned concludes, as Judge Baverman concluded in Kirby, that Mr. Anthony's testimony as to authorship of questioned writings as well as similarities and dissimilarities between questioned and known writings is admissible under Fed. R. Evid. 702, Daubert and Kumho Tire.

The undersigned therefore **RECOMMENDS** that Defendant's Motion to Exclude Testimony from Forensic Document Examiner [Doc. 128] be **DENIED**. The undersigned further **RECOMMENDS** that Defendant's Motion to Exclude Testimony from Forensic Biologist J. Bradley Pearson [Doc. 127] be **DENIED as moot.**

The Court, having ruled on all pretrial motions, **CERTIFIES** this case **READY FOR TRIAL**.

IT IS SO ORDERED, this the 9 day of January, 2004.

Susan S. Cole

SUSAN S. COLE
United States Magistrate Judge